

Black Box KVMC4K-2P

Black Box USB-C 4K KVM Switch, 2-Port User Manual

Model: KVMC4K-2P

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Black Box USB-C 4K KVM Switch, 2-Port (Model KVMC4K-2P). This device enables users to control two USB-C enabled computers from a single DisplayPort monitor, keyboard, and mouse, thereby optimizing workspace and streamlining workflow. Please read this manual thoroughly before operating the device to ensure proper setup and functionality.

2. PACKAGE CONTENTS

Verify that all items are present and in good condition upon opening the package:

- Black Box USB-C 4K KVM Switch (KVMC4K-2P)
- Power Adapter (12V DC)
- USB-C Cables (quantity may vary, typically two are included for computer connections)
- User Manual (this document)

3. KEY FEATURES

The Black Box USB-C 4K KVM Switch offers the following features:

- Supports 4K Ultra HD (3840x2160) resolution at 60Hz with 4:4:4 color sampling output to a single DisplayPort enabled monitor.
- Compatible with PC computers, tablets, Chromebooks, mobile phones, and any device supporting DisplayPort Alt-Mode over USB-C.
- Includes four USB 2.0 HID device ports for keyboard and mouse, and two high-speed USB 3.0 ports for other peripherals.
- Features a front-panel button for easy computer selection.
- Enables plug-and-play functionality for keyboard and mouse without requiring additional drivers.

4. PRODUCT OVERVIEW

Familiarize yourself with the KVM switch's front and rear panels.



Figure 1: Front Panel View

This image displays the front panel of the Black Box USB-C 4K KVM Switch. Visible are the brand and model name, a USB HID port, a USB 3.0 port, and three buttons: two for selecting computers (labeled '1' and '2') and a 'SELECT' button for switching.

4.1 Front Panel

- **HID USB Port:** Connect a keyboard or mouse.
- **USB 3.0 Port:** Connect high-speed USB peripherals or a USB hub.
- **Computer Selection Buttons (1, 2):** Manually switch between connected computers.
- **SELECT Button:** Used for switching between computers.

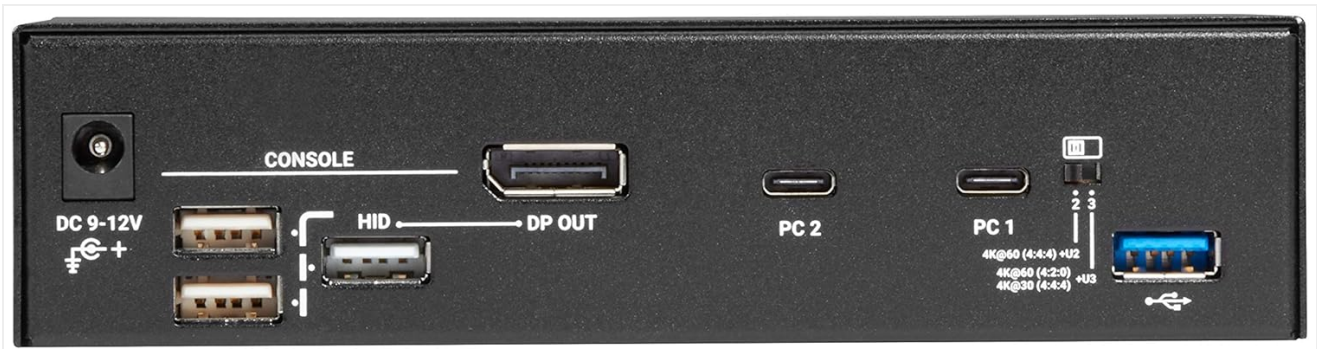


Figure 2: Rear Panel View

This image shows the rear panel of the Black Box USB-C 4K KVM Switch. From left to right, it features the DC 9-12V power input, multiple USB ports (including HID ports), a DisplayPort (DP OUT) for the monitor, and two USB-C ports labeled 'PC 2' and 'PC 1' for connecting computers.

4.2 Rear Panel

- **DC 9-12V Power Input:** Connect the included power adapter.
- **CONSOLE USB Ports (HID):** Connect your keyboard and mouse.
- **DP OUT:** Connect your DisplayPort monitor.
- **PC 1 / PC 2 (USB-C):** Connect your two USB-C enabled computers. These ports support DisplayPort Alt-Mode for video and USB data.
- **USB 3.0 Port:** Additional high-speed USB port for peripherals.

5. SETUP INSTRUCTIONS

Follow these steps to set up your KVM switch:

1. **Power Off Devices:** Ensure all computers and the monitor are powered off before making connections.
2. **Connect Monitor:** Connect your DisplayPort monitor to the **DP OUT** port on the rear panel of the KVM switch.
3. **Connect Keyboard and Mouse:** Connect your USB keyboard and mouse to the **HID USB** ports on the rear panel (or front panel if preferred). For specialized keyboards or mice, consider using the USB 3.0 ports.
4. **Connect Peripherals:** Connect any other USB peripherals (e.g., printer, USB drive, webcam) to the available USB 3.0 ports on the KVM switch.
5. **Connect Computers:** Connect each of your two USB-C enabled computers to the **PC 1** and **PC 2** USB-C ports on the rear panel using high-quality USB-C cables that support DisplayPort Alt-Mode and data transfer. *Note: Not all USB-C cables are identical; ensure yours supports the necessary video and data protocols.*
6. **Connect Power:** Connect the included power adapter to the **DC 9-12V** power input on the rear panel, then plug it into a power outlet.
7. **Power On:** Power on the KVM switch, then your monitor, and finally your computers.

6. OPERATING INSTRUCTIONS

6.1 Switching Between Computers

To switch control between the connected computers, use the front panel buttons:

- Press the **SELECT** button on the front panel to cycle through the connected computers (PC 1, PC 2).
- Alternatively, press the dedicated **1** or **2** buttons to directly select the corresponding computer.

The KVM switch will automatically switch the DisplayPort video, USB keyboard/mouse, and other connected USB peripherals to the selected computer.

7. TROUBLESHOOTING

If you encounter issues with your KVM switch, refer to the following common problems and solutions:

- **No Video Output:**
 - Ensure all DisplayPort and USB-C cables are securely connected.
 - Verify that the USB-C cables used for connecting computers support DisplayPort Alt-Mode.
 - Try using different, high-quality DisplayPort and USB-C cables.
 - Ensure the KVM switch is powered on.
 - Check your monitor's input selection.
 - If using a high-resolution ultrawide monitor, some compatibility issues may arise. Try a lower resolution temporarily to diagnose.
- **Keyboard or Mouse Not Responding:**
 - Ensure the keyboard and mouse are connected to the designated HID USB ports.
 - Try connecting the keyboard/mouse to the USB 3.0 ports if HID ports are problematic, especially for specialized gaming peripherals.
 - Verify that the correct computer is selected on the KVM switch.
 - Reconnect the USB cables for the keyboard and mouse.

- **USB Peripherals Not Detected or Functioning Intermittently:**

- Ensure peripherals are connected to the USB 3.0 ports.
- Try connecting the peripheral directly to the computer to confirm functionality.
- Some high-power USB devices may require an external power source.

- **Computer Not Charging:**

- This KVM switch does not provide power delivery to connected computers. Computers must be powered independently via their own power adapters.

- **Intermittent Video or USB Disconnections:**

- This can often be caused by low-quality or excessively long USB-C or DisplayPort cables. Replace with certified, high-quality cables of appropriate length.
- Ensure all connections are firm and secure.

8. SPECIFICATIONS

Feature	Specification
Model Number	KVMC4K-2P
Video Resolution	Up to 4K Ultra HD (3840x2160) @ 60Hz (4:4:4)
Video Output	DisplayPort
Computer Connections	2 x USB-C (DisplayPort Alt-Mode)
Console USB Ports	4 x USB 2.0 HID
Peripheral USB Ports	2 x USB 3.0
Operating Voltage	12 Volts (DC)
Dimensions (L x W x H)	9.5 x 7.25 x 3.75 inches
Item Weight	0.01 ounces
Control Method	Front Panel Push Button
Connectivity Protocol	USB

9. MAINTENANCE

To ensure the longevity and optimal performance of your KVM switch, follow these maintenance guidelines:






- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Avoid using liquid cleaners or aerosols, which may damage the unit.
- **Ventilation:** Ensure the KVM switch is placed in a well-ventilated area to prevent overheating. Do not block any ventilation openings.
- **Environment:** Operate the device within its specified temperature and humidity ranges. Avoid extreme temperatures, direct sunlight, and high moisture environments.
- **Cable Management:** Keep cables organized and free from kinks or excessive bending to prevent damage and ensure reliable connections.

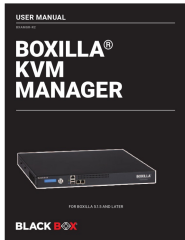
10. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official Black Box website. If you require technical assistance or have questions not covered in this manual, please contact Black Box customer support.

Contact information can typically be found on the manufacturer's website or on the product packaging.

Related Documents - KVMC4K-2P

	<p>Black Box KVD200-2H 2-Port 4K HDMI Dual-Head KVM Switch User Manual</p> <p>User manual for the Black Box KVD200-2H 2-Port 4K HDMI Dual-Head KVM Switch. This document provides specifications, installation instructions, and operation details for controlling two computers with 4K dual HDMI video output from a single console.</p>
	<p>Black Box Emerald GE Gateway EMD3000GE User Manual KVM Over IP</p> <p>User manual for the Black Box Emerald GE Gateway (EMD3000GE), providing detailed information on specifications, setup, configuration, operation, and regulatory compliance for KVM over IP solutions.</p>
	<p>Black Box Emerald GE EMD3000GE User Manual: KVM Gateway Setup and Operation</p> <p>User manual for the Black Box Emerald GE EMD3000GE KVM Gateway. Covers specifications, overview, configuration, operation, safety notices, and regulatory information for high-performance KVM extension over IP.</p>
	<p>Black Box Advanced 2/4/8-Port DisplayPort Secure KVM Switch User Guide</p> <p>User guide for the Black Box Advanced 2/4/8-Port DisplayPort Secure KVM Switch (USM-2S0-MM7), covering installation, security features, technical specifications, operation, troubleshooting, and warranty.</p>
	<p>Black Box ACX300 CATx DVI/HDMI + USB Extender EC User Manual</p> <p>Comprehensive user manual for the Black Box ACX300 CATx DVI/HDMI + USB Extender EC, detailing its specifications, features, installation, operation, switching capabilities, and troubleshooting guidance. Includes regulatory statements and trademark information.</p>



[Black Box Boxilla KVM Manager BXAMGR-R2 User Manual](#)

User manual for the Black Box Boxilla KVM Manager (BXAMGR-R2), detailing installation, configuration, device management, and system operations for KVM and AV systems.